

Area Description (see attached map)

Dewey Wills WMA is located in the southern portion of Catahoula and La Salle Parishes. Compartment 4 is located in portions of compartments 10, 11, 12, 13, 14, 19, 21, 22, and 23 of T6N, R4E and encompasses 1028 acres of bottomland hardwood forest. The compartment is bounded by Muddy Bayou to the west, Ring Levee Rd. to the north and east and Camp Bayou Rd. and Compartment 5 to the south. The terrain is relatively flat ranging from 45' to 50' MSL.

Current Conditions

Most of the acreage of this compartment has been impacted by oak decline. Oak decline is not a disease, but a combination of many factors, natural and man-made, that weakens a tree and causes mortality. Presently, Nuttall oak and overcup oak are the primary species affected. Willow oak has also been affected, but to a much lesser degree. Signs of oak decline are thinning foliage, or lack of foliage at the terminal end of branches, heavy epicormic branching along main branches (overcup oak), numerous dead branches or the presence of red oak borers. Within compartment 4 there is approximately 1.514 mbf/acre of sawtimber and 9.389 cords/acre of pulpwood.

Forest Types

The forest types associated with this compartment are the Nuttall Oak-Overcup Oak, the Overcup Oak-Bitter Pecan, and the Willow Oak timber types.

The Nuttall Oak-Overcup type is the most diverse timber type within the compartment, representing 43% of the area and consisting of 444 acres. Tree species associated with this type vary with elevation changes. Lower areas contain primarily Nuttall oak, overcup oak, bitter pecan, and green ash. As the elevation increases the occurrence of overcup oak and bitter pecan decreases. The higher areas of this type often contain Nuttall oak and few of the previously mentioned species with the addition of willow oak. Timber quality is generally poor; however, advanced regeneration of desired tree species is abundant due to the amount of open canopy found within this timber type. The canopy coverage averages 62%. The midstory coverage is 72% and consists of deciduous holly, hawthorn, swamp privet, and advanced regeneration and pre-commercial size trees. The understory coverage is 50% and consist of black berry, greenbriar, red vine, poison ivy and rattan; various forbs and grasses; small shrubs such as deciduous holly and hawthorn as well as the seedlings of the major tree species.

The Overcup Oak-Bitter Pecan type is associated with sloughs and areas of lower elevation within the compartment, representing 22% of the area and consisting of 224 acres. Primary species include overcup oak and bitter pecan along with Nuttall oak and green ash. Persimmon and red maple are also present. Baldcypress will occur in the lowest sites within this type. Timber quality is fair and stocking is generally low. The canopy coverage averages 62.5%. The midstory coverage is 62.5% and consists of swamp privet, deciduous holly and water elm, as well advanced regeneration and pre-commercial size trees. The understory coverage is 62.5% and consist of vines; rattan, poison ivy and greenbriar; small shrubs such as deciduous holly and

swamp privet, with water elm and button bush in the lower elevations. Seedlings of the major tree species can also be found.

The Willow Oak type occurs on the highest elevation of this compartment, representing 52% of the area and consisting of 538 acres. The primary species for this type is willow oak, with cedar elm in some areas. Nuttall oak, overcup oak, bitter pecan, and green ash also occur within this type in depressions and among the willow oak. Timber quality of the willow oaks is comparatively good within this type. In older stands where natural mortality has occurred, willow oak regeneration has become well established. The canopy averages 68.2% coverage. The midstory is 65.5% and consists of deciduous holly and hawthorn, as well advanced regeneration and pre-commercial size willow oak. The understory coverage is 52.7% and is usually somewhat open. It consist primarily of palmetto, blackberry, greenbriar, red vine, various forbs and grasses; small shrubs such as deciduous holly, hawthorn and French mulberry as well as the seedlings of the major tree species.

Soils

The soils found in this compartment are Bursley silt loam, Deerford silt loam, Forestdale silty clay loam and Fausse clay, frequently flooded. Most areas of these soils are used for woodland and habitat for woodland wildlife. Forestdale and Bursley types are the prominent soil types. The following descriptions are according to the NRCS Soil Survey.

Deerford silt loam (Da): This level, somewhat poorly drained soil is on slightly convex, low ridges on low stream terraces at the elevation of flood plains. Flooding is rare. Tree species suited to this soil type include willow oak, water oak, Nuttall oak, sweetgum and loblolly pine.

Bursley silt loam (Br): This level, poorly drained soil is on low stream terraces at the elevation of flood plains. It has high potential for the production of Nuttall oak, Willow oak, swamp chestnut oak and green ash.

Forestdale silty clay loam (Ff): This level, poorly drained soil is in low areas and on broad flats on low stream terraces at the elevation of flood plains. The most common trees are overcup oak, water hickory, Nuttall oak, sugarberry, green ash and baldcypress.

Fausse clay, frequently flooded (Fc): This level, poorly drained soil is in old channel scars and other depressional areas at the lowest elevation on the alluvial plains. The most common trees are baldcypress, water tupelo, water locust, bitter pecan, black willow, and overcup oak.

Arranged from the highest average elevation to lowest; Deerford, Bursley, Forestdale and Fausse.

Wildlife

This compartment currently provides habitat for a wide variety of game and non-game species of wildlife as well as fur-bearers. Species commonly found within the compartment include white-tailed deer, fox squirrels, rabbits, Wild turkey, feral pigs, waterfowl during the fall and winter months, Louisiana Black Bear, and migrant and resident birds. Fur-bearers include beavers, raccoons, opossums, bobcat and gray fox. The treatment proposed will promote herbaceous browse and cover for white-tailed deer and rabbits and improve crown growing conditions to stimulate mast production. In treated areas, both large and small den trees will be retained for those species that require nesting cavities. Bird species requiring an early successional habitat type will also benefit from the treated areas.

Objectives

- Removal of stressed and dying trees in treatment areas
- Improve habitat for game and non-game wildlife through successional diversification
- Improve growing conditions for developing timber stands
- Release pre-commercial willow oak stands
- Maintain large cavity/den trees in treatment areas.

Methods

Improvement Thinning (259 ac)

- Combination individual selection and group selection harvesting method on 259 acres consisting of two units
- Trees to be cut will be marked with blue paint.
- Boundaries will be marked with orange paint
- Remove trees that are in decline, of poor quality, or where overstocked
- Small groups (1-3 acres in size) to be interspersed throughout the thinned area

Concerns

- Road maintenance during logging activities
- Excess skinning of residual trees
- Excess rutting in low or wet areas

Treatments

A timber harvest will be used to achieve the objectives set forth for this compartment. Improvement thinning utilizing the individual tree selection and group selection method will be used to expedite the development of a healthier stand of timber while retaining and further developing key wildlife habitat within the treatment areas. The individual tree selection method will allow for thinning from above and below, focusing on the better quality trees and species for each site marking in such a way to improve the growing conditions for residual trees. Emphasis will also be placed on retaining a variety of cavity trees to accommodate wildlife species that require them both large and small cavities. The group selection method will allow for the release of advanced regeneration. Areas of poor quality timber, low stocking, or presence of advanced regeneration will be selected for groups. Group size will vary, depending on forest condition, up to 3 acres. The combination of these methods will allow for the recruitment of regeneration and improved growing conditions for residual trees while increasing the structural diversity of the treated area.

Logging Requirements

- No harvesting during wet periods
- No harvesting during the firearm seasons for White-tailed deer
- All logging slash near sets should be piled when set is abandoned
- Logging access will be Headquarters Road to Hwy 28 for the north unit and Camp Bayou Road for the south unit
- Follow Louisiana BMP guidelines at all times

Additional Entry Requirements

- none

Attachments

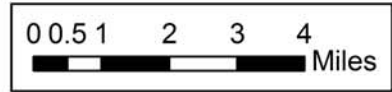
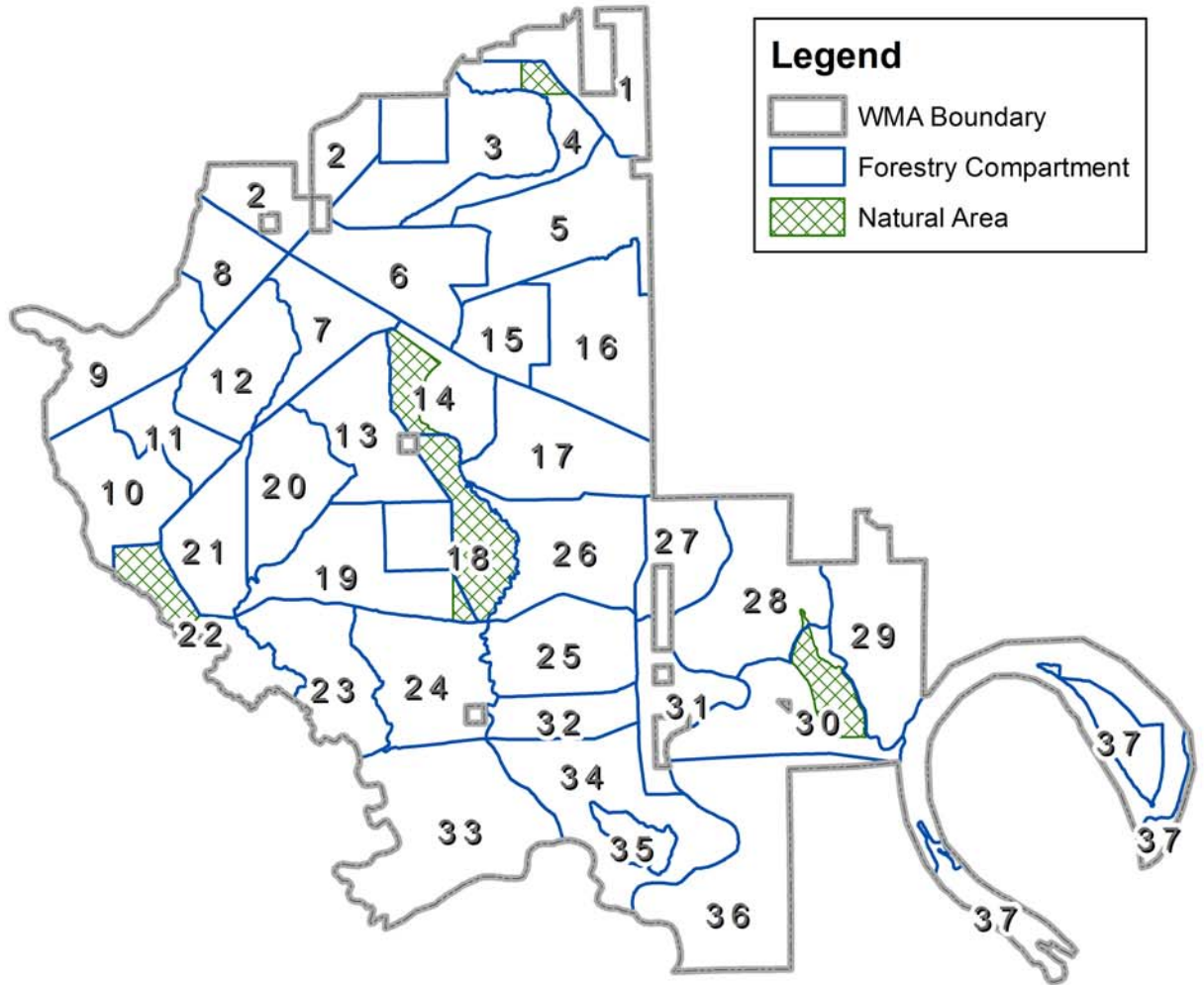
Map 1: WMA Compartment Map

Map 2: Forest Type Map

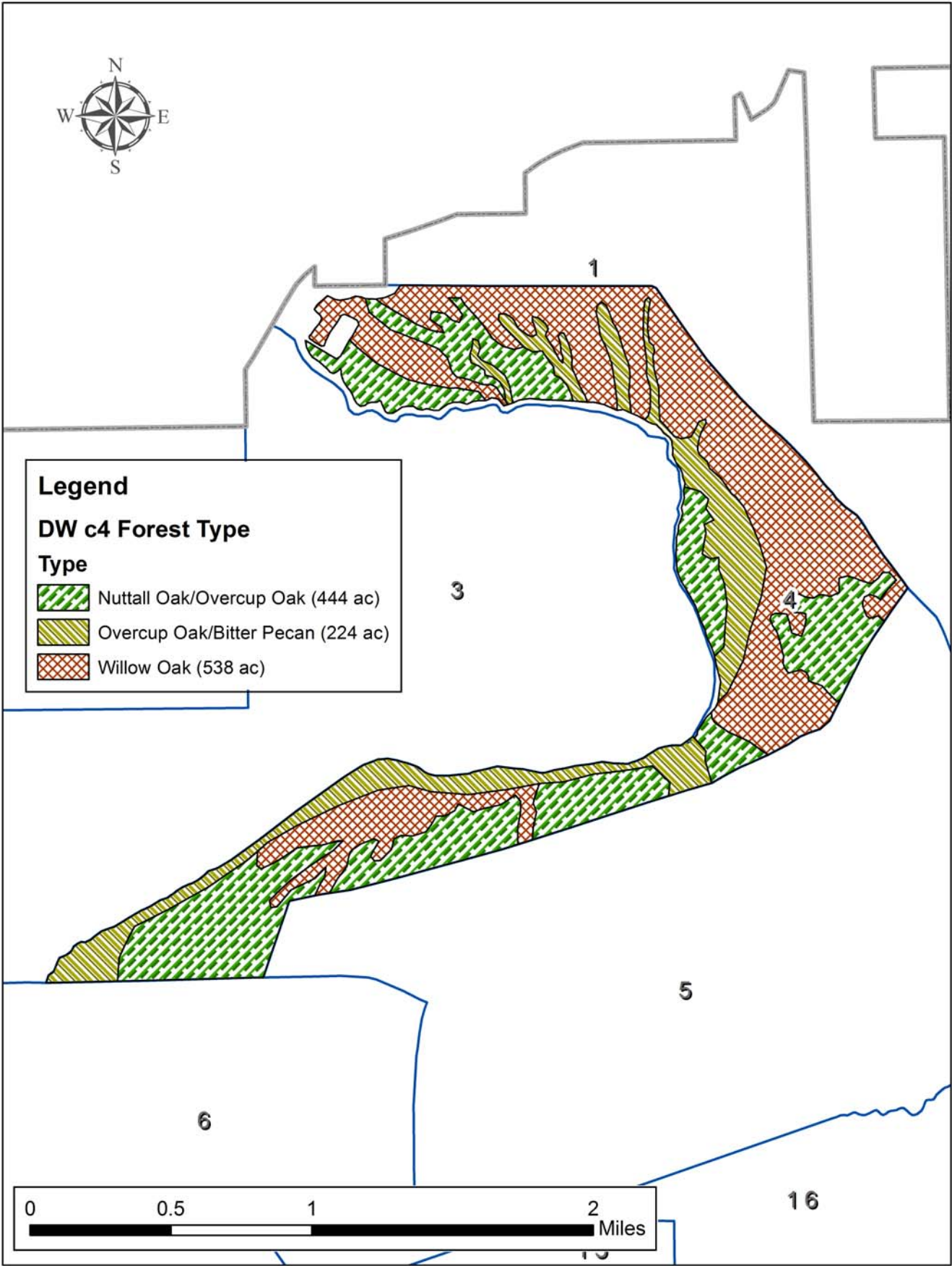
Map 3: Proposed Treatment Map

Map 4: Adjacent Treatment Map

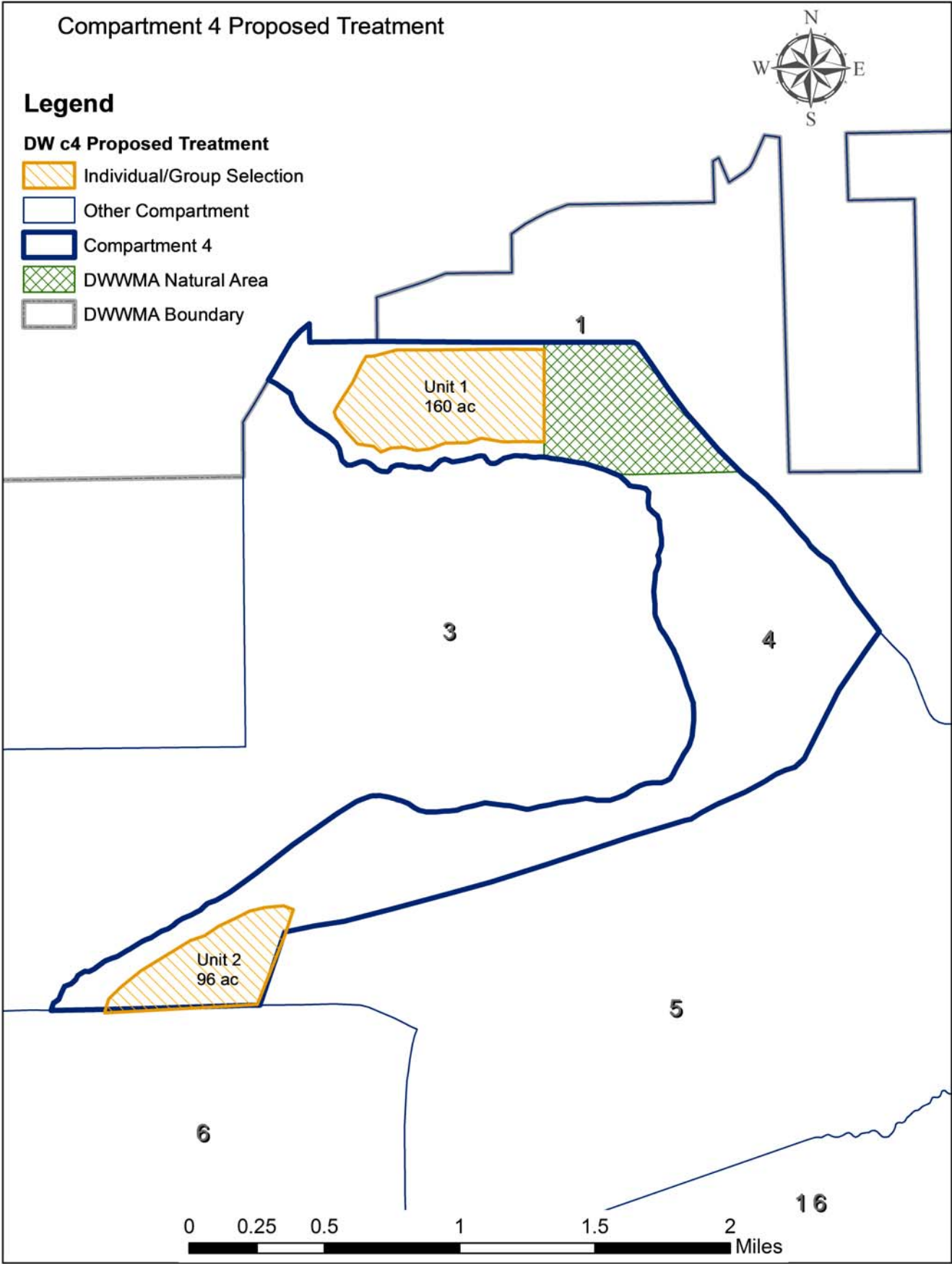
Dewey Wills WMA Forestry Compartments and Natural Areas



Dewey Wills WMA Compartment 4 Forest Type



Dewey Wills WMA Compartment 4 Proposed Treatment



Dewey Wills WMA Past Treatments

